

AMERICAN FARMER.

RURAL ECONOMY, INTERNAL IMPROVEMENTS, PRICES CURRENT.

"O fortunatos nimium sua si bona norint
Agricolos." . . . VINO.

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AGRICULTURE.

FROM THE JULY NO. OF THE NORTH AMERICAN REVIEW.

*Lettres écrites d'Italie en 1812 et 13, à M. Charles Pic-
tet, l'un des Rédacteurs de la Bibliothèque, Britanni-
que, par Frédéric Sullin de Chateaurieux. A Paris et
à Genève, 1816, 2 vols. 12mo. pp. 576.*

Perhaps there are none of our natural advantages which it still remains for us fully to appreciate and avail ourselves of, so much as those which respect the agriculture of our country.

Without running into all the errors of the economists or adopting their entire theory, we trust that we may assert the paramount importance of this pursuit, particularly to the United States. To every country it affords at least a partial, and often a complete subsistence for its population; it gives a constant and healthful employment to sometimes more than half, and never less than a fifth of the community; its profits though not so large, are more certain than those in other employments of capital; and while it replaces the annual advance invested, a surplus profit has accrued, and an accession of national wealth been secured, which can be employed as private interest and the public good may require. But in the United States the cultivation of the soil has these and many more advantages; nay, it is intimately connected with our national character, because it powerfully acts upon the morals and constitution of our citizens. If it be true, that the torch of liberty has always burned with a purer and brighter lustre on the mountains than on the plains, it is still more true, that the sentiments of honour and integrity more generally animate the rough but manly form of the farmer, than the debilitated body of the artisan. There is in that primitive and honourable occupation, the culture of the earth, something which while it pours into the lap of the state an increase beyond every other employment, gives more than the fabled stone, not only a subsistence but a placid feeling of contentment; not only creates the appetite to enjoy, but guarantees its continuance by a robust constitution, fortified with the safeguards of temperance and virtue.

The anxiety of our countrymen to possess in fee a spot of ground however small, and the consequent paucity of leases, is a fact no less curious than it is solitary. This is not the case, or at least in any considerable degree, in any other country. Such indeed in Britain were formerly those small proprietors called Franklins, who possessed a keen spirit of independence and a determined opposition to oppression; feelings, which, with the alienation of their farms, have gradually departed from the breasts of their descendants.

Notwithstanding, however, the ease with which the pride of independent possession may be gratified, it is not the less true, that agriculture, instead of being

• Farmers and country labourers, on the contrary, may enjoy completely the whole funds destined for their own subsistence, and yet augment at the same time the revenue and wealth of their society. Over and above what is destined for their own subsistence, their industry annually affords a neat produce, of which the augmentation necessarily augments the revenue and wealth of their society. Smith's Wealth of Nations, vol. iii. p. 178.

• Farmers and country labourers, indeed over and above the stock which maintains and employs them, reproduce annually a neat produce, a free rent to the landlord. Ibid. p. 186.

a favoured, has been a degraded and unpopular pursuit; that instead of cherishing every motive which might lead to its honourable extension, we have endeavoured gradually to weaken its legitimate efforts. It is indeed a singular inquiry, why the cultivation of the soil among us should have been so little encouraged, when every state in Europe, since the peace of Aux-la-Chapelle, has turned its most assiduous attention to this most important department of domestic economy, and ultimately borrowed from it the resources which have carried them through the prodigious conflicts of the last generation.

There have been many causes, certainly not all of equal efficacy, which have co-operated against the interests of agriculture. But there is a prominent one to which we can but just allude. During a very considerable period, since the peace of '83, the peculiar situation of Europe has afforded opportunities for commercial enterprise too tempting to be resisted. American merchants received, in the lapse of a very few years, the most astonishing accessions of wealth; and fortunes, ordinarily the fruit of a laborious life, and never the portion of many, were amassed with unparalleled rapidity, and by large numbers. Our domestic prosperity more than equalled the extension of our trade. It was then that the counting-houses of our merchants were filled with youth from the country, who forsook the slower but surer emoluments of agriculture, for the mushroom but unsubstantial fortunes of commerce; nay, who preferred the meanest drudgery behind the counter of a retailer, to the manly and invigorating toil of the cultivator of his paternal acres. Unfortunately this spirit of migration was encouraged by too great a success in trade. Feelings of vulgar pride contracted in town caused the manual labour of the farmer to be regarded as degrading; this unworthy sentiment spread with baleful influence, and when the counting houses become overstocked and afforded no longer a resource, it was no uncommon thing to see a young man with no qualifications but a little bad Latin picked up at a miserable village school, forsake a large and fertile farm and apprentice himself to a poor country attorney.

Another cause of the depressed state of agriculture, mentioned in a late publication,† is the constant emigration to the west. There must necessarily be a tendency to a most impoverishing system of cultivation, where people feel that after having extracted all the richness of the soil, they may throw it up and remove to a country, which offers them an untouched surface, and needs no artificial aid of composts or manure. The land besides suffering from negligence consequent on the prospect of departure, will be worn out by successive crops, and long be rendered unfit for the more valuable dispositions of the agriculturalist. Indeed we have been informed, that in many instances, when the land is almost ruined by the continued culture of tobacco, it is sold by the planter to some enterprising and laborious individual, who may restore it by his patience and attention, while he himself removes to another spot, where the same wretched system of exhaustion may again be renewed.—There are other causes we might mention, such as the unwieldy size of our farms, and particularly the want of a regular, enlightened farming system. But we cannot now stop to enter on these topics, but may notice them hereafter.

If then agriculture be so important an item in a nation's resources, affording subsistence to its population, and a surplus capital to be employed in the

various objects of national industry and enterprise, it would seem to follow, that nothing but very imperious circumstances should induce any government to repress its vigour or palsy the exertions of those devoted to it. Immediately connected with such an attempt was the late bill before Congress, establishing a new tariff of duties. But why go back to a bill which was rejected? We answer, that it is not to be forgotten that private interest is one of the most powerful incentives to action, that the manufacturing interest is large and increasing, that one defeat will not discourage its partisans, and lastly, extraordinary as the fact may seem, that the bill in question, fraught with such varied evil, was thrown out by a majority of only one vote in the senate. The tendency of this project, was not only to introduce an unequal system of taxation, but first, by the destruction of a large part of our foreign commerce, to diminish very materially the market for our home products, and secondly, to divert a large portion of agricultural industry into the service of the loom and spinning jenny.

But it will be asked, are manufactures then to be entirely neglected? Most certainly not. Still there is a certain limit, in a newly settled country with a thin population, beyond which their establishment is not only useless to government but a burden to the people. It is undoubtedly true that the manufacture of articles of immediate necessity or very general circulation ought to be encouraged by a wise and provident people; but it ordinarily happens that these need no extraordinary patronage; their extended use soon gives a facility to the artist, which enables him to enter into competition with the foreigner, provided the raw material is to be found at home in any tolerable abundance. Thus we find that hats were manufactured in the colonies at a very early period; together with household furniture, saddlery, &c. they have long since ceased to be an article of importation. It is necessary for the well being and security of a nation, that certain articles should be manufactured within its limits, such as gunpowder, coarse clothing, and some others of a similar description.‡—But the moment a people attempt to force by means of high duties on foreign imports the production of a commodity, which, by reason of the extravagance of the wages of labour and other causes, must necessarily be sold at a much greater price than the imported one, their conduct would seem no less an affront to common sense, than a solecism in political economy.

The United States possess a very restricted capital; and as the tilling of the soil requires comparatively much fewer advances than any other department of industry, that capital became immediately invested in agriculture. Land, cheap and fertile, constituted a fund which gave a certain profit. And as the productions of the labour of more than five-eighths of our population went to purchase foreign articles either of luxury or necessity, a great and profitable intercourse was constantly maintained with Europe. Under an equitable system of foreign duties, arising from this commerce, the expenses of government were defrayed, our debt gradually extinguished, and by a powerful but necessary reaction our agriculture improved and extended. But the tariff bill restricted a large and valuable commerce principally with Britain. It is not to be supposed that, while we refused the broadcloths and hardware of England, she would still continue to buy the same proportion of our cotton and tobacco.

† Letters on the Eastern States.

‡ See our last number, p. 323.

Our market then for these articles would be so far lost; and if we now feel the effects of a diminished demand for our produce in consequence of the establishment of peace in Europe, how can it be thought a wise policy to suffer other embarrassments and losses, by excluding ourselves entirely from every foreign part where we might calculate upon its sale? Where then is our produce to find a vent? For assuredly the most enthusiastic friend of domestic manufactures could never imagine, that the most extensive establishment of them could ever give an adequate consumption for the present amount of our agricultural productions.

The bill then imposing heavy duties on foreign articles, besides diminishing the number of the cultivators of the soil, would in some degree operate as a tax on its fruits, because, while the price of manufactures was enormously increased, the value of produce would be more than proportionally diminished. For the cultivator, not only deprived of the benefit of a competition between the domestic and foreign consumer in the sale of his articles, is obliged to purchase those of his neighbour, at any price which his cupidity and the tariff may determine. The expenses of the state being still the same and its usual resources dried up, a general but unequal system of taxation would be adopted, which in fact, the farmer bending under the weight of this partial policy, is less able to pay whatever contribution may be levied. These assertions are by no means novel; they are mere corollaries from the plainest and most undoubted principles of political economy. Dr. Adam Smith, the great father of the science, and all whose views on this subject, though not acted upon in a country whose domestic policy was too firmly established to be changed without a most serious revolution, ought to have great weight with us in the adoption of any permanent system, speaks in this decided manner in his *Wealth of Nations*, vol. iii, p. 201. 'It is thus that every system which endeavours, either by extraordinary encouragements, to draw towards a particular species of industry a greater share of the capital of the society, than what would naturally go to it; or, by extraordinary restraints, to force from particular species of industry some share of the capital which would otherwise be employed in it; is in reality subversive of the great purpose which it means to promote. It retards instead of accelerating the progress of the society towards real wealth and greatness; and diminishes instead of increasing the real value of the annual produce of its land and labour. All systems either of preference or restraint therefore, being thus completely taken away, the obvious and simple system of natural liberty establishes itself of its own accord. Every man, as long as he does not violate the laws of justice, is left perfectly free to pursue his own interest his own way, and to bring both his industry and capital into competition with those of any other man or order of men.' M. Say, a man no less remarkable for his practical knowledge of manufacturing industry, than his profound acquaintance with every branch of economical science, has given his marked disapprobation of that system which we are discussing. 'Lorsqu'au travers de cette marche naturelle des choses,' says he, 'l'autorité se montre et dit: le produit, qu'on veut créer, celui qui donne les meilleurs profits, et par conséquent celui qui est le plus recherché, n'est pas celui qui convient, il faut qu'on s'occupe de tel autre; elle dirige évidemment une partie de la production vers un genre, dont le besoin se fait sentir davantage.'—*Traité d'Economie Politique*, tom. i. p. 168. We can only refer to pages 172 and 201 for the expansion of these ideas. It is thus we find that the arguments adduced in favour of this system neither accord with the convictions of fact nor the suggestions of reason. Whenever the increasing capital devoted to the land can no longer be profitably employed, then manufactures will flourish and the surplus profits of agriculture be legitimately devoted to their support.

During the late war, the prospect of large gains caused by the extravagant price of all European

commodities, caused many persons in our country to embark their fortunes in cotton and woollen factories. These factories were brought into being by a temporary and unnatural state of things. On the return of the peace of 1814, many of these manufacturing establishments came of necessity to an end. Some establishments remain and ought to succeed, because they prove that the profits of their capital may enter into competition with that employed in agriculture. In this case the transfer is not only natural but conducive to national wealth.

But we are asked to patronize manufactures at the expense of agriculture, on the ground of our being rendered really more independent by them. This is, however, but an attempt to conceal private interest under the garb of patriotism, and ought at least to awaken suspicion. We are not to be called *dependent* merely because a state of war might give rise to many inconveniences. We can do without silks or broadcloths, while we possess the real means of sustenance and defence. But these factories once established, say the advocates of this interest, the citizens ought to support them in their present languishing condition, and therefore ought not to buy, even at a much less price, foreign articles in preference to our own. The force and propriety of such reasoning would appear to be similar to that of a gardener, who having in winter devoted himself to the cultivation of flowers, &c. by means of artificial heat, should in the spring apply for an act of the municipal authority, forbidding all persons to pluck a daisy or violet in the field, and requiring them to resort to his hot-house. So far from there being a necessity for any interference on the part of government, we believe we may assert that our manufactures never were so flourishing as since the peace. It is true that many establishments have been broken up and much capital sunk, but it is a fact that those factories which are in the hands of individuals, have generally been successful, while those conducted by incorporated companies wanting the circumspection and prudence of private interest have as often become bankrupt. In the western states this branch of business has greatly improved, and recent information enables us to affirm, that the profits which are now realised are nearly as large as those during the war. In the east, we might cite an instance, which must put down all cavil on this subject. The cotton factory at Waltham near Boston, begun when manufactures were by no means in so promising a situation as at present is a triumphant answer to every one who demands additional encouragement for the loom, and a new tax on his brethren to extend its operations.

But we hasten to return from our wanderings, and to introduce our readers to the work, of which we have prefixed the title to this article. It is in the form of letters addressed to Professor Pictet of Geneva, from various places in Italy, and contains the author's remarks upon that country. He dwells not on the palaces of Venice, neither worships at the altar of Roman genius in the Pantheon, but taking his silent way through the fields, he describes that which gave birth to both; he informs us of the processes of Italian farming, of the effects of irrigation, and of the general state of Italian agriculture. And, in our opinion, he has shewn as much taste in the execution

§ 'Qui est-ce qui sollicite des prohibitions ou de forts droits d'entrée dans un état? ce sont les producteurs de la denrée dont il s'agit de prohiber la concurrence, et non pas les consommateurs. Ils disent, c'est pour l'intérêt de l'état; mais il est clair que c'est pour leur uniquement. N'est-ce pas la même chose, continuent-ils, et ce que nous gagnons n'est-il pas autant de gagné pour notre pays? point de tout:—ce que vous gagnez de cette manière est tiré de la poche de votre voisin, d'un habitant du même pays et si l'on pouvait compter l'excédant de dépense fait par les consommateurs, en conséquence de votre monopole, on trouverait qu'il surpasse le gain que le monopole vous a valu.' *Traité d'Economie Politique* par Jean-Baptiste Say, tom. 1, p. 203.

See Letters on the Eastern States—Letter on Manufactures.

of his design, as those travellers who have employed themselves upon inquiries commonly thought as interesting, but certainly not as useful. M. de Chateauxvieux appears to be an enthusiastic admirer of the subject on which he writes, as well as to have a practical knowledge of all its details. His book is very little known among us, though it has lately been translated in England, and formerly occupied the attention of a celebrated critical journal of that country. It is our intention in this article to put our readers in mind of its existence.

The author divides Italy into three regions, distinguished by their different systems of cultivation. The first extends from mount Cenis and the Alps of Suza to the shores of the Adriatic. The fertility of Lombardy is proved by the constant succession of its crops, and to this province he has given the name of 'Pays de Culture par assolement,' or the district of culture by rotation of crops. The second of the regions reposes on the southern declivity of the Appennines, from the frontiers of Provence to the boundaries of Calabria. This is called the District of Olive trees, or, by an association somewhat forced, of Canaanitish culture. The third region is that of *Malaria* or patriarchal cultivation, from a supposed resemblance, which we are still less able to enter into, between the shepherds of the older and the present time. It is found from Pisa to Terracina, and comprehends the plain between the sea and the first ridge of the Appennines.

Lombardy has been often called the Garden of Europe, and seems abundantly entitled to the appellation. The soil is not only rich and alluvial, but deep and perfectly level. The climate is humid, and the system of irrigation supplies water to almost every field. These circumstances united to the heat of a southern sun, cause a most rapid and luxurious vegetation. Nothing can be more important in the economy of a farm than the situation of the farm-house and its out buildings. In this respect our American farmers are lamentably deficient, and though we would not recommend as a model the one described by de Chateauxvieux as common in Lombardy, still we think it would afford some valuable hints. The buildings raised on the four sides of a square, present on one side a central elevation of two stories. The lower part for the farmer, the upper story for his grain.—Adjoining this, at each end, is a stable plastered so as not to let the dust descend, for the cows and oxen: the other three sides of the square are enclosed by a sort of portico, open within, and supported by columns, which serves as a depository for straw, hay, &c.—This structure is about twenty-four feet broad and fifteen high. Half the court is paved, the remainder is used for threshing out the corn, which, in the primitive way, is still done by horses. The place for manure is outside of the court. This plan presents the most space with the least building, and assures the preservation of every product.

The farms in Lombardy are small, and do not often contain sixty arpents; notwithstanding M. de Chateauxvieux asserts against Arthur Young, that they bring more to market than the large farms, and that there is no country in the world which can dispose of so large a portion of its productions as Piedmont. If the fact be so, it may possibly arise from the peculiar character of the persons who cultivate the land.—Our author, however, remarks, that this system of small farms can never take place till the advances of capital have carried agriculture to its highest point. Lombardy is cultivated by a species of farmers, called *metayers*. They pay a small fixed rent, valued at one half the produce of the meadow, or forty francs the arpent. The clover belongs to them entirely: the crops of wheat, Indian corn, and flax, and the wine and silk are equally divided between them and their landlord. The latter advances nothing but the taxes, and of course must find such an arrangement singularly advantageous. Father and son continue the same engagement without the formality of a lease or any registry of the contract. M. Say regards this

* An arpent is to an acre nearly as five to four.

system as unfavourable to agriculture, and in his treatise on Political Economy, book ii. chap. 9, vol. 2, says, 'ily a des cultivateurs qui n'ont rien, et auxquels le propriétaire fournit le capital avec la terre: on les appelle des Métayers. Ils rendent communément au propriétaire la moitié du produit brut. Ce genre de culture appartient à un état peu avancé de l'agriculture, et il est le plus défavorable de tout aux améliorations des terres; car celui des deux, du propriétaire ou du fermier, qui ferait l'amélioration à ses frais, admettrait l'autre à jouir gratuitement de la moitié de l'intérêt de ses avances.' Though the cultivation of land by metayers may be unfavourable to its amelioration, still it may be easily imagined, that the smaller products of every little farm, will be greater as each must possess both a garden and a poultry yard. Every field in Lombardy is encircled with a band of poplars, mulberries, oaks, &c. and they are often so thick that the eye can scarcely penetrate the rich growth of leaves. From the boughs luxuriant vines hang in festoons, and present to the passing traveller a scene of rural beauty and enjoyment which he may search for in vain in other countries. The shade of the trees does not injure the crops, such is the invigorating effect of a humid soil and an Italian sky.

Of the constant succession of crops, we here know very little; indeed it is the result of experience alone. So much depends on climate, that we imagine the rotation practised elsewhere can never afford certain information to us. The largest quantity of the most valuable product, which may be taken from a spot of ground in any number of years, is a problem whose solution is of the greatest importance. In Piedmont the rotation is generally as follows:

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| 1st year, | Indian corn, manured, |
| 2d " | Wheat, |
| 3d " | Clover turned up after the first cutting, and followed by a fallow. |
| 4th " | Wheat. |

This rotation, says M. de Chateaufieux, is one of the most abundant, and may be pursued indefinitely, notwithstanding the recurrence of wheat, though perhaps the result may be attributed to the abundance of manure furnished by a meadow cut three times. After stating that a farm of sixty arpents supported a family of eight or nine persons, who kept twenty two head of large cattle, of which two oxen and a cow are fattened every year, as well as one or two hogs, that it gave about one hundred and twenty five dollars worth of silk, and furnished more wine than could be consumed, that the preparatory crop of Indian corn and beans almost subsisted the metayers, and that nearly all the grain might be sold as well as a great quantity of smaller products, he celebrates the industry and management of the Piedmontese proprietors in the following terms: "It will be easy for you after this, to conceive how Piedmont is perhaps, of all countries, that where the economy and management of land is best understood, and the phenomenon of its great population and immense exportation of produce will thus be explained."

In the neighbourhood of Piacenza, cattle rather than grain constitute the wealth of the farmers. The cows and oxen are distinguished by immense horns and beautiful figures, and we believe that our American race is in no way to be compared with them. Their origin is said to be Hungarian; the males are noble animals, but the cows give little milk. To remedy this inconvenience, two thousand cows are imported from Switzerland, and the valuable qualities of the animal are thus perpetuated. The cattle are almost universally of a slate grey colour. The rotation of crops is here as follows:

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| 1st year, | Indian corn and hemp, manured, |
| 2d " | Wheat, |
| 3d " | Winter beans, |
| 4th " | Wheat, manured, |
| 5th " | Clover ploughed after the first cutting, |
| 6th " | Wheat. |

This succession however, can only be pursued in a rich soil, which is manured every three years.—There is one article we beg leave to notice particularly. We imagine that the winter bean might easily

be introduced among us and with great advantage, as it is capable of supporting the cold of the severest winter. It is sown in the beginning of September, and it must have considerable growth before autumn to resist the attacks of the cold. The stalk then perishes by the frost, but at the moment the genial warmth of the spring is felt, two or three new stalks arise, which bloom in the month of May, and the beans are fit to gather at the end of July. The management of this important vegetable we give in the words of the author. 'La culture est extrêmement simple; après une récolte du blé fumé, on retourne la terre par un seul labour et on la laisse émietter par l'influence de la saison. Aux premiers jours de Septembre on sème les fèves, soit en les enterrant à la charrue, soit en les recouvrant à la herse, soit enfin avec le semoir, qui les place par rangées, de manière à pouvoir au printemps les sarcler avec la houe à cheval. Si on ne suit pas cette dernière méthode, il faut les sarcler à la main, dans le courant d'avril.' The culture of the winter bean is suited to argillaceous soils, and while it allows the proper intervals between ploughing the ground and sowing wheat which succeeds, it is admirably calculated to maintain the fertility of the ground.

The plains which border on the Po, in the vicinity of Parma and Lodi, support those fine animals, whose milk is converted into the celebrated Parmesan cheese. The grass is here far more valuable than any crop of grain. In the summer the cows are housed and fed with the green grass of the first and second mowings; that of the third is converted into hay. At the end of autumn the cows are allowed to pick up whatever may be left in the fields. These meadows are perhaps the most fertile on earth; they are generally mowed four times a year. The cheese is here never made from less than fifty cows, and as the farms are small, there is one common establishment, to which the milk is brought twice during the day; an account of it is kept by the cheese-maker, and settled in cheese every six months. The same plan has been introduced in Switzerland.

In the Milanese, the farms are larger than in other parts of Italy, because the culture of the grasses demands less care and labour than other branches of farming and fewer advances. Irrigation is here carried to such an extent, that every two or three arpents can be inundated by its own canal. The good quality of the grass however, in time becomes deteriorated, other plants gradually spring up in the place of the grasses; the sluices are then closed, and the ground is ploughed for hemp; after which, and a crop of legumes, oats, and wheat, it is again laid down in grass. A meadow will generally last fifteen years, and the course of harvest returns every five years. M. de Chateaufieux gives the following remarkable outline:

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| 1st year | Hemp, followed by legumes, |
| 2d " | Oats, |
| 3d " | Wheat followed by legumes, |
| 4th " | Indian corn, |
| 5th " | Wheat, |
| 15th " | Natural meadow, dunged every three years, and mowed four times a year. |
| 20 years | 67 |

Of these sixty seven crops from the same ground, there are sixty one for the use of animals, five for the sustenance of man, and only one for his clothing. There is, perhaps, no country on the face of the earth which can boast such a proportion of agricultural products. To obtain this result, the ground is manured, very profusely, however, five times in twenty years, and it is a singular fact, that this manure is applied always to the grass and never to the grain.

The culture of rice occupies a part of Italy, and is a source of great profit to the owner of the soil. The difficulties in its cultivation are so trifling, that contrary to the usual custom, the ground is let out at a fixed rent of one hundred and sixty francs the arpent; three crops are received every five years. As with us, these rice grounds are most unhealthy, and the stagnant water which covers them produces dis-

ease in all the surrounding country. The unfortunate peasant rarely escapes its deleterious effect, and the government, sensible of this constant draft on human life, have prohibited the further extension of the culture of this grain.

One of the most singular features in the physical character of Italy, is the constant elevation of the beds of rivers, particularly the Arno and the Po, by means of depositions of earth and stones, brought down by the heavy rains from the mountains. They had become so alarming, that the raising of dykes yielded to a very ingenious operation called *Colmata*, by which the water of the river was allowed to overflow a certain space, and this very deposition about three or four inches in a year, made to raise the level of the adjacent shores. But this process, which is fully described by Sismondi, must necessarily have a limit. Embankments are resorted to and in some places the bed of the Po is absolutely thirty feet above the level country. The Po even now frequently overflows and devastates its banks: the inhabitants provided always for the calamity which unfortunately is not unfrequent, take to their boats and wait till the inundation has subsided. There would seem to be little doubt that at some day not far distant, the whole delta of the Po or *Polesino*, as it is called, will become one wide and wretched marsh. Even now the roads are often impassable. Ferrara, consecrated by the genius of Ariosto and Tasso, will be extinguished, and Ravenna, already fallen from its high honours, be known only as the deserted capital of a potentate of the lower empire.

M. de Chateaufieux, climbing the mountains which separate Tuscany from Modena, and leaving behind him the fertile plains of Lombardy, entered those lofty regions, where the earth does not produce sufficient sustenance for the inhabitants, who are employed with their flocks of goats and sheep in constantly traversing the mountains in a manner somewhat similar to that of the Spanish shepherds. The author employs himself in describing the scenery of the Cormiche, and though it is perhaps among the finest in Europe, and he might have felt all its changeable beauty and sublimity, still we think that he is far more fortunate in his delineations of rural economy.

The agriculture of Tuscany has been so fully and ably investigated by Sismondi,* that little was left to M. de Chateaufieux. The valley of the Arno in truth, the only fertile part of the dukedom (for the rest is composed of precipitous mountains, or that silent and hideous district the Maremma) stretches from Cortona to Pisa, and forms about one sixth of its whole territory. The farms are very small, being from three to six arpents, so that one pair of oxen supplies the necessities of ten or twelve metayers, in the working of their little plat of ground. They manifest, however their extravagance in maintaining a horse which may transport their produce to market, and their wives and daughters to mass or a rustic ball. The most general rotation of crops is here:

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| 1st year, | Indian corn, beans, peas or other legumes, dunged, |
| 2d " | Wheat, |
| 3d " | Winter beans, |
| 4th " | Wheat, |
| 5th " | Clover sown after the wheat, cut in the spring and followed by sorgho. |

This *sorgho* is a sort of parsnip, which is reduced into flour, of which they make a bad soup and a poor polente. The ground is manured only once in five years, a circumstance which abundantly proves the richness of this deep alluvial soil. Notwithstanding all this fertility, and a cultivation which resembles rather that of a garden, than a farm, the country does not produce enough to resist the effects of a bad year. The metayers live with the greatest economy, and though their cottages are built with a taste which seems indigenous to the country, the interior exhibits a total absence of all the conveniences of life, and supplies but a frugal subsistence. Such is the

* Tableau de l'agriculture Toscane, par J. C. L. Sismondi.

view which M. de Chateauxvieux has taken. But in our opinion the peasantry of Tuscany under all circumstances, are not only more neat in their persons, but better clothed and apparently enjoying more happiness, than that of any other district in Italy. There can be little doubt that all this distress and privation arises from the system of the metayers; a system, which deriving its existence from the feudal state, is equally to be deprecated, whether we consider the political character of the community or the individual happiness of its members. The man who has no other possession than his industry, and who cannot hope to change his situation, can never have such a stake in the state, as to render him either an intelligent or valuable member of it. On the other hand, the metayer bound to furnish half the seed and to divide and sell the produce, pretty generally consumes one year the fruits of the last; or if there be a surplus, how is it to be invested? There would seem to be no other mode, than in the sticks which he is bound to supply, for the support of the vines, for the landlord provides the stock and repairs the house. He then can only lay up his money in his chest or spend it on his pleasures. Thus the end of a year finds him no better off than at its commencement, for want of such an interest in the soil, as would secure him from the effects of his negligence and indifference in its cultivation.

Before leaving this part of Italy, we ought to mention a subject which is of some little importance; the manufacture of straw hats, which has just commenced in our country. It is doubtless a most profitable exertion of industry. The raw material costs nothing, and M. de Chateauxvieux informs us that this branch annually amounts to three millions (we presume) of francs. The straw is of beardless wheat, cut before it is ripe, and whose vegetation has been thinned (*étiolée*) by the sterility of the soil. This soil is chosen among calcareous hills; it is never manured, and the grain is sown very thick. The women who are employed in making the Leghorn hats, earn from about thirty to forty cents per day, no trifling sum in Italy.

The Maremma or country of the Malaria forms the third district, extending from Leghorn to Terracina, and from the sea to the mountains, and having a width of twenty-five or thirty miles. M. de Chateauxvieux speaks of this singular country in the following terms: "Le ciel reste également pur, la verdure aussi fraîche, l'air aussi calme; la sérénité de cet aspect semble devoir inspirer une entière confiance, et je ne saurais cependant vous exprimer l'espèce d'effroi que l'on éprouve malgré soi en respirant cet air à la fois si suave et si funeste." A country so very singular in its character would necessarily require a very peculiar system of management. Our author develops this system in a visit he made to a domain called Campo Morto, in the most deserted part of the Maremma. Here was a Fattore, charged with the administration of the farm. The whole Maremma of Rome is in the hands of eighty proprietors, who are called mercanti de' tenuti, and reside as well as their Fattori in the city. On this farm there were four hundred horses, of which one hundred were broken, two thousand hogs, which ran in the woods and fed on the acorns; some hundreds of cows, who give no other revenue than the sale of the calves, which is estimated at about eight dollars each cow; one hundred oxen used to the plough, and about four thousand sheep. The rent of this farm was about eighteen francs the arpent of cultivated land, amounting in all to about \$22,000. The annual profit was about \$5000, besides interest at five per cent, on the capital of the flocks.

In the midst of this establishment there was a vast *casale* or farm house, destitute of furniture, and inhabited but a very few days in the year. Every thing around breathed the most perfect desolation; all was vast and silent. The harvest had just commenced, and a thousand labourers, of whom one half were women, had descended from the mountains to gain a small pittance during a few days, by reaping the rich grain of six hundred and sixty arpents for the lordly proprietor, and if they did not perish at their

toil, to go back after having respired the elements of a miserable death. Some days had elapsed since the harvest began, and only two labourers had been attacked by the fever of the Malaria; every day would, however, increase the number, 'till at the completion of their task, scarcely half of them would remain. 'What then becomes of these unfortunate people?' said M. de Chateauxvieux: 'They get a piece of bread and are sent off,' was the inhuman reply. 'But where do they go to?' 'To the mountains; some stop on the road, some die, others get home almost expiring with misery and famine, only to follow the same life the next year.'

The Malaria is one of those singular phenomena whose origin has baffled every effort at discovery, and the remedy for which has never yet been ascertained. Attempts have been made to cultivate the soil of the Maremma, and colonies were established within its circuit, but the resistless scythe of sure and silent death swept away the presumptuous intruders. During half of the year, a few miserable beings, armed with lances and clothed in skins, the living images of death, wander over these devoted plains with their flocks; and if accident should delay their return to the mountains, fall certain victims to this fatal disease. Immense numbers of sheep, cows, horses, and goats find a subsistence on these wastes and supply the markets of Rome and the Val d'Arno. The soil is extremely steril; the whiteness of the pure argil being only alloyed by a mixture of sulphur, which is produced in great profusion. The cause of the Malaria, as we before remarked, has escaped all the investigations of science; it still remains a mystery no less profound, than its effects are dreadful.—Some have supposed it to arise from the low pools of stagnant waters, which collect on the face of the Maremma; but the disease prevails on the heights of Radicofani and within the lofty precincts of Volterra.

Some have supposed that the disease was caused by exposure to the sudden changes of temperature at the going down of the sun.† This is supported, it is true, by the very weighty fact related by de Bonstetten in his *Voyage au Latium*, of a man who resided at Ardea sixteen years without being indisposed. But we doubt whether any solution that has ever been proposed was so perfectly ridiculous, or so completely destitute of foundation. Do the people then die in the towns of this disease, where we know it to be a custom not to go out after dark, of mere exposure to a changing atmosphere? A short distance from the Porta del Popolo at Rome, are two villas, one on each side of a small lane, but both situated on high ground. We were informed that during the summer season, a man would run very imminent danger of death in sleeping in one, while he might remain in the other with perfect impunity. How is this to be reconciled with the doctrine that the disease caused by the Malaria is nothing but fever and ague, brought on by exposure? The truth is, this dreadful enemy every year makes further inroads; no longer satisfied with pursuing the wretched thousands of enervated labourers and shepherds, who at evening crowd for safety into Rome, it is advancing into the city in the midst of darkness, and spreading from the Porta del Popolo, on the one side, and from the Palatine on the other, up the sides of the Quirinal. In 1791, says M. de Chateauxvieux, Rome had a population of 160,000; at the time of this visit, it numbered only 100,000, of whom more than 10,000 were gardeners, shepherds, and vine-dressers. Four years afterwards we heard it computed at from 80 to 90,000. Undoubtedly political events have had no small effect in diminishing the number of inhabitants; but still we believe the Malaria must have had a no less powerful influence. Annually it roams over the finest villas without the walls, and ravages large districts of the town within; and neither the magnificence of the villa Borghese, nor the luxuriant beauty and towering pines of Doria Pamfili, can resist the assaults of this silent and deadly foe. Time seems to

hold its mantle over the queen of cities, and to prepare by a fate as extraordinary as its former history, to blot it out from the admiration of mortals. Encompassed already by the awful stillness of a desolate waste, once filled up with sixty towns, which the antiquarian in vain attempts to trace, perhaps her own site may be hereafter unknown; and some future traveller may boast with enthusiasm of having once again penetrated its deserted streets, of having visited the spot ennobled by the heroic virtue of Junius Brutus, or the eloquence and wisdom of Cato the censor. But we must leave a subject, on which we could dwell still longer with delight, and conclude our notice of a book, of which we would hope our readers have received a favourable impression. The subject of the work is not only important in itself, but most interesting to us. Italy is essentially an agricultural country; she is neither a manufacturing nor a commercial state. It is by her agriculture, that she supports more than 17,000,000 of inhabitants, or about 1237 to a square league; a population far superior to that of France or England. It is her agriculture which laid the foundations of those splendid cities which crowd her plains; it is her agriculture, which, should it ever be protected by an enlightened government, will again yield nourishment to the principles of liberty, and raise her to a level with the most respectable nations of Europe.—M. de Chateauxvieux has devoted himself to the illustration of this noble subject, and we are confident that his work will not only afford many valuable hints to the practical farmer, but some lessons to our statesmen, in any future attempts which may be made to elevate manufactures at the expense of the most dear and invaluable interests in our country.

FOR THE AMERICAN FARMER.

METHOD OF CUTTING OFF CORN AND STACKING IT IN THE FIELD, DESCRIBED.

Morefield, Hardy County, Va.

DEAR SIR—You inform me that the experiment made in your state of taking the corn off the field with the fodder, has not succeeded.

That the corn was subject to rot, if the weather was warm or wet; also, that it increased the labour.

Our method is as follows:—We are prepared with cutting knives made out of worn out or broken grass scythes—one cut in the middle, will make two corn cutters—the back of the put end drawn into a spike, and a piece of wood put on something like a sickle handle.—We begin on the side of our field that seems to be the driest. A boy goes on between the 8th and 9th rows, and counts to the 8th hill, then ties, or locks together the four centre hills above the ears, which four hills are not to be cut, but left for a support to begin the stack—he then counts on sixteen hills farther, and ties the four hills in the same manner, and so on to the end of the rows, and field.

The two first cutters take one the seventh and eighth, the other the ninth and tenth rows, the two next cutters take the fifth and sixth, and the eleventh and twelfth—they walk between these rows and take the corn hill under their left arm, and cut it near the ground, and cast it forward, so as to put five or six hills together;—the carriers take it and set it round the four hills tied and left standing: setting it up straight and well, putting as near as they can an equal proportion all around, if we are doubtful our corn is too green, or the weather too warm or wet. After the first eight rows are cut and set up, we begin the next row of stacks, and go on leaving eight and cutting eight rows throughout our crop—in a few days the half stack will be cured: we then begin with the first, and cut and put to

† See Edinburgh Review for March 1817, p. 57.

them the last eight rows; when the stacks have had three or four days to cure, we tie them about two thirds of their height from the ground to prevent the fall winds from disturbing them. In this way, eight hands will secure ten acres per day, and the fodder will be good. We find it better than hay, so much of the saccharine substance being retained in the stalks, that large cattle eat it too near the ground. I believe that ten acres saved in this way will be nearly equal to twenty any other way that we have saved it. The part of our crop that we want for immediate use, to fatten pork, &c. we husk on the stalk, and cut and stack the fodder in the same way, only we finish the stacks as we go. Care should be taken to cut near the ground, or the stubs will be in the way of cutting the grain with the cradle, as there will be some the harrow will not pull up.

The above method we have practised for at least twenty years, and could not keep the stock we do now any other way. There will be found a great difference in corn. The hard, white, or yellow flint, will do to cut up, when the fodder is much greener, and better than the large deep grained corn. It is also advantageous to cut green or young corn, that will not ripen before frost—as much more will become good by being cut up and stacked, than will be so if it is frost bit, and the fodder will be very fine—it appears to receive sustenance from the stalk long after it is cut up.

I am sir, with respect, Yours, &c.

ABEL SEYMOUR.

Communicated for publication in the American Farmer.

Pittsfield, March 24th, 1818.

SIR,—By the last mail I had the satisfaction of addressing you on the ever interesting and inexhaustible subject matter of our correspondence, in which I enclosed a small sample of *Lucerne*, and at the same time, and in two separate enclosures, some *tréfoil*, and a few *Winter Squash* seeds, from Palermo, which if as good as I have eaten in Italy, are far superior to any I have met with in America.

As in your first communication you intimated a wish to be made acquainted with my practices in farming, and of the tools we make, and use; I had contemplated, as the most effectual way to answer your views on this head, to communicate to you a plan of the Homestead, a sketch of our barn-yards and offices, a copy of our farm journal, with sketches of some tools, and a plan of the system of rotation, laid down, and now acting upon, for the homestead farm.

With this, you will receive a part of these items, the rest shall follow, as soon as time will permit me to work on and finish them—for I should remark, that in our hard climate, a farmer who must get his living by farming, can have little time which he can call his own—as it takes every moment of spring, summer, and autumn to prepare for winter, and every moment of winter, to be in readiness for the ensuing campaign.

No. 1.—Contains a sketch of the principal Barn-Yard, and farm buildings, on my father's farm, which we call the Melvill Homestead; it contains about an acre and a quarter, and with the help of bog earth, muck from the pond, weeds, and straw, we are enabled to make in it about 900 loads of manure per year, including about 100 loads made in the Hog Yard.—At the Farm Barn, and at the Shed N, we make about 300 loads more.

No. 2.—Is a plan of the Steam House, which from experience, I consider, one of the most interesting parts of the farm establishment; as by means of it, the farm can keep, (and keep well) double the stock it could without this system, and it procures us the best possible market for all the turnips and potatoes we can raise.

No. 3.—Drawing of seed Harrow and Roller—from both which we have experienced the good effects—until this experiment *Seed Harrows* were almost unknown here—in fact I may say totally, for what they call one, is a good load for a pair of horses—when I was at work on them (the fall before the last) one neighbour laughed at the idea, thought to ridicule it with the name of the *fine toothed comb*. I let them laugh, finished the harrows, used them, and those who had laughed most, when they saw the fine smooth surface of our grain lots, and those stocked in, would fain have borrowed them, to use themselves.

In a country where labour is so expensive, it is absolutely necessary to investigate every method to economise it—this was one of my calculations in introducing this kind of harrow, and the manner of using them.—The common harrow in use here, is about 4 feet square, (or 16 feet) and very heavy; it requires a yoke of oxen, or a pair of horses, and a man or boy—now with a man or boy and 3 horses, we work three harrows, and of course we go over 27 feet of ground (and in less time) and do the work, as it ought to be done—thus saving 1-8th of the team, and more than 1-3rd of the manual labour.

Our large harrows are made in the same manner, but to use separate, or connected together, as circumstances require;—on one side of one of them, we have a link, and a ring, at about 6 inches from each end, and on one side of the other, a link and toggle, at the same distance from each end; we then turn the head of one harrow, to the heel of the other, (side by side,) thus

making a long square—connected by the links and toggles—we then draw from the centre, by means of a draft chain, one hook of which is attached to the front centre square of each harrow, and the chain of the evener, (if drawn by horses) or that of the yoke, if drawn by oxen, hooked to the centre of this draft chain—of the former we put in 3—of the latter 2 yoke, and driven by one man—each harrow 22 teeth.—The Roller is so described, that it is necessary to enlarge on it.

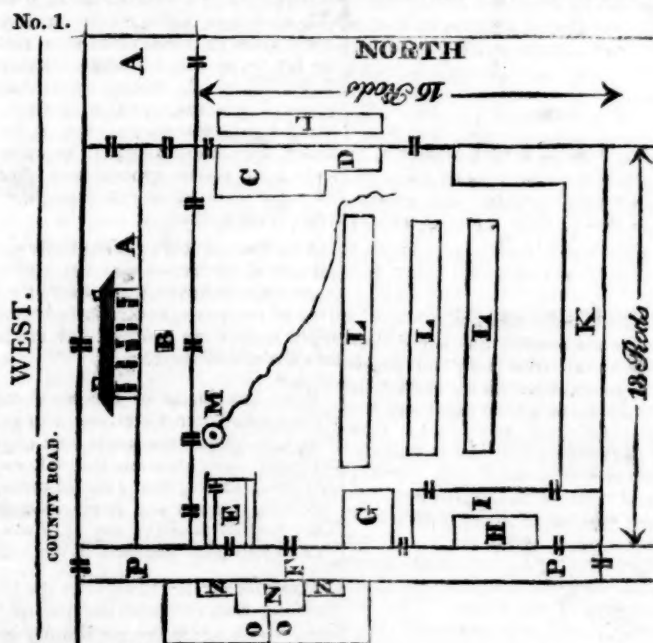
I rejoice to see that by the projected improvements in your water communication, your section of country is about to be induced to diminish at least, the cultivation of Tobacco, which I conceive diametrically opposed to a good system of agriculture—being on the subject, it occurs to me, that I remarked in the Belgique, and in Alsace, where they cultivate this vegetable, or weed, to great extent for Europe, they make use of *night soil* reduced to powder, as a powerful stimulus to a soil already exhausted by this culture—in fact, the tobacco, when cured, partakes a little of the smell of what forced it into existence.—These improvements will also facilitate the means of procuring plaster, with which, clover, herds, and rye grass, you will soon be able to turn your worn out tobacco fields into luxuriant fields of grain, green crops, and grass.

I must close for the present, by offering my most cordial salutations.

THOMAS MELVILL, Jun'r.

* I have made on the drawing a kind of hook and chain, where we fix the connecting chain.

Sketch of principal Barn Yard, and Farm Buildings, on Melvill Farm—Pittsfield.



- A. The house, front yard and garden, (2 acres.)
- B. Back yard of house.
- C. Barn, for horses and cattle, and for storing turnips on the ground floor—above, hay, straw, &c.
- D. Cattle shed.
- E. Steam house, or boiling house, with cellar, under it for potatoes—a shed on each side (with mangers fixed to the sides of the building) for the cattle to stand under to feed—(turnips, or potatoes mixed with chopped straw.)
- F. Principal entrance to barn yard.
- G. A building, for corn house and granary above, and below, for carts, wagons, ploughs, and farming utensils generally.
- H. Hog pen.
- I. Hog yard.
- K. For hay and straw stacks.
- L. Manure heaps.
- M. Well and spring.
- N. The centre building, contains below, a cyder mill and press—and the shaft, and lower ma-

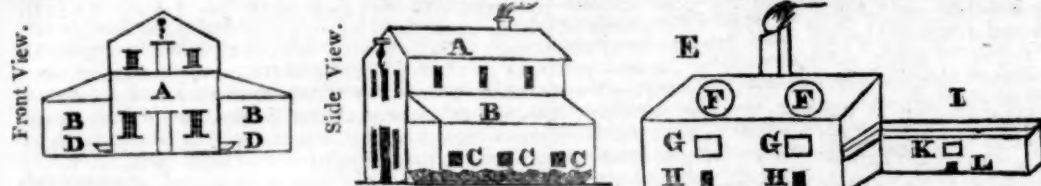
chinery, which by horse power, propels a machine for cutting hay, straw, and corn stalks, and a grind stone (situated in the story above;) a hopper on the floor, facilitates the descent of the cut food immediately into the cart, wagon, or other vehicle, for transportation where it is needed—on the ground floor also we have our conveniences for the necessary carpentering, joinering, &c. required on a farm, (we make all the wood work of our tools) and for storing the necessary woods for seasoning. The buildings on each side of the principal one, are sheep sheds with lofts above for hay.

O. Yard for the flocks.

P. P. Principal entrance and passage through the farm. About the centre of the farm, is what we call the farm barn, for grain, with two sheds, adjoining, (with lofts above for hay) for cattle and sheep, the whole enclosed in a yard about an acre, well situated for making manure—which is greatly facilitated by having a piece of bog of about 4 acres, within 50 rod.

No. 2.

STEAM HOUSE.

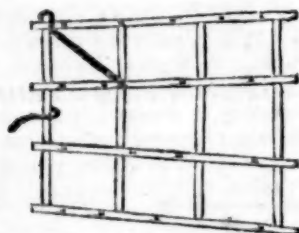


- A. Boiling and steaming house.
 B. Sheds, on each side for the cattle to stand under, with separations of 4 feet high, to keep them separate and quiet, while feeding.
 D. Manger, the whole length to receive the food when prepared, 24 inches wide at bottom, 30 inches at top.
 C. C. C. Sliding openings, out of which the food is thrown into the mangers.
 E. Boiling and steaming apparatus.
 F. Kettles, that hold about 80 gallons each—with tubs to fit into the tops for steaming, at the same time.
 G. G. Furnace, or oven, for fuel.

- H. H. Ash Pits.
 I. Kiln for making Malt, drying grain, oats, to prepare for making oat-meal, and barley, for hulling.
 K. Oven, or furnace.
 L. Ash pit.
 NOTE—The ground floor, contains the apparatus, as above, bins for ground provender, and vats for mixing the food, with chopped straw. Upper floor for straw, and a straw cutter, by hand. Immediately at the threshold of the front door, is a wide trap door so that by backing the cart the potatoes are thrown immediately into the cellar therefrom, by tipping it up only.

No. 3.

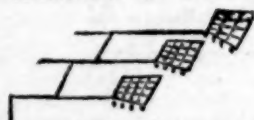
SEED HARROW.



Length 3 feet 4 inches, breadth 2 feet 5 inches, at top, 2 feet 11 inches at bottom—each harrow 18 tines, or teeth of iron, one inch square at the top.—Joice, 2½ inches square, (Black Birch) slats 2 inches wide, 1 inch thick of Red Elm.

Iron to draw by, and which serves at the same time as a brace—it is secured by an iron bolt and screw at each end, through the joice, which bolt serves instead of a pin to secure the slats and joice together.

Dimensions of tine or teeth.



Three seed harrows in motion, a horse to each and a boy to drive the whole—the halter of the first off horse made fast to the centre of the trace of the right horse,—the second off horse to the first.

ROLLER.



4 feet 9 inches
 Made of a Birch stick, bored from end to end, (2 and

In this paper we commence the publication of an abstract view of the Cattle Shows and Agricultural Fairs, in the northern States, and in Kentucky. They have been furnished by a friend to our establishment, and a zealous promoter of domestic economy, and all the more useful sciences—living in Philadelphia

By this exhibition of the activity, perseverance and success of our northern brethren, we hope to present a profitable example to our patrons in the South—where, although great earnestness and talents have been of late years, displayed in their essays on husbandry—yet little has been done at the meeting of

their Societies, in the way of practical exhibition. To be familiar with the philosophy of Agriculture is very well, even in the abstract; but it is much better when it leads to an augmentation and more judicious use of the fruits of agricultural labour. We want to see our southern friends come out with their shows of fine horses—cattle—hogs—their ploughing matches—their improved implements—with the statements of the actual produce of their fields, and account of profit and loss. The great difficulty is in breaking the ice—let this be done, and the current of competition will rapidly move on, producing in its course all those valuable results to society—which grow out of keen and honourable emulation in good works.

In the hope of contributing to these results, we now submit an

ABSTRACT OF ACCOUNTS OF Northern Cattle Shows and Fairs.

No. I.

Communicated for the Farmer, and published for the consideration of Southern Agricultural Societies.

Philadelphia, May 25, 1820.

SIR—The accounts of the numerous cattle shows and fairs, which were held in the United States, during the last autumn, are so highly interesting and afford such manifest proofs of good cultivation, improvement in breeds of cattle, a laudable spirit of emulation, and lastly furnish so much pleasing information on the subject of the various departments connected with the tillage of the earth and rural economy, that I have deemed it highly important to give, in one view, an abridgment of the more full details of them, in order that the farmers of the other states may follow the example of their eastern brethren, and rouse from that state of lethargy, which to a great degree has prevailed among them.

J. M.

I shall begin with the exhibition of the Hartford County Society, Connecticut, which was the first held.

The following stock were exhibited:

1. Several yokes of very fine working oxen.

The committee of inspection, say, "whether considered in reference to their size, the beauty of their colour, or the elegance of their forms, they have been such as to gratify in a high degree the feelings, and greatly to exceed their expectations. From the age of the oxen, which were generally young, it was obvious that the institution of this Society has had no small share in stimulating their owners in feeding, training and matching them; and has consequently been instrumental in producing many of those excellencies for which they were so justly admired."

2. The specimens of calves not exceeding six months, were peculiarly interesting. Many of them far exceeded in every desirable quality, any exhibition of the kind which the committee had ever witnessed. The existence of this fact, they justly consider as one of the beneficial effects of the institution of the Society, and as affording a sure promise, that future exhibitions will continue to evince a rapid and general improvement in the breeding, raising and feeding domestic animals.

The swine exhibited, afforded the same evidence of improvement in breeds and treatment, as were presented in the neat cattle.

The sheep, merino, and the common breeds were excellent in their several kinds. The wool of one merino buck, was from 10 to 12 inches long, and of a very fine quality.

Thirty premiums for superior farm stock, were awarded to different persons. Mr. Gad Lewis, of Bristol, shewed the best bull: Mr. Geo. Willis, of Hartford, the best cow.

3. One of the objects of the Society being to encourage domestic and especially household manufactures, several specimens were exhibited, and among others, an elegant imitation of Leghorn bonnets.—These were made by two young ladies of Wethersfield, from a common grass of the vicinity, called

ticklenath. It is to be regretted, that the botanical name was not given; and the propriety of still informing us of it, is suggested. These bonnets, when compared with many of the first of foreign fabric, were found not to be excelled for beauty of workmanship or texture—one of them was sold for \$30. This is an important fact—not less than one million of dollars are annually sent out of the United States for the single article of bonnets; all of which might be saved by making them at home, and at the same time giving employ to some thousands of women and girls, who are now absolutely idle, and many of whom are driven by absolute necessity to follow the paths of vice. It is to be hoped that the ingenuity of New England will be exerted in bringing forward the manufacture of these home-made bonnets, and that machines for weaving the article will be substituted for the hands.

The names of the young ladies to whom we are indebted, for this particular specimen of an important article of dress, are SOPHIA WOODHOUSE and SALLY HANMER, and they deserve the thanks of every true friend to their country, for the originality of the thought, and for giving another proof of the resources which our country possesses for independence, and for full employment to ingenious and industrious females, for whom the objects of occupation are at present so few.*

Silk dresses, sewing silk, white and coloured linen thread, hearth rugs, and cotton counterpanes, made by several ladies, were also exhibited: and when it is considered that all these articles were made, without interfering with the main business of the persons thus employed, they may be considered as so much added extra to the national wealth. As to silk, it is well known, that before the American war, it was raised to a considerable extent in Connecticut, and in Pennsylvania, and that numerous ladies were clothed in gowns of it, from silk worms propagated in their families; there can be no reason why they may not do the same again. The business is much better understood here than formerly, and the mulberry is more abundant; our common red mulberry leaves, answer as well as the Italian, to feed the worms. Premiums were distributed for various articles of domestic manufactures.

4. Ploughing matches formed part of the interesting spectacle—five competitors entered the field, each with a single yoke of oxen, and without leaders.—The field was divided into sections of one rood to each team. One of the ploughs used on the occasion was made by Mr. King, of Enfield; the other two were Wood's patent ploughs; and the committee were unable to say which of them produced the handsomest and best work. Mr. Spencer, of East Hartford, finished his rood in 31 minutes—Mr. Mills in 32, and Mr. Mather in 42 minutes.

Another object of the Society being to stimulate farmers to good husbandry, by giving premiums for the best specimens of farms. A visiting committee constitutes one of its departments, and the following is part of their report:

They notice with praise, the plan which Mr. B. I. Boardman, of Hartford, has adopted, in draining and improving a bog meadow, which had hitherto been but little better than a marsh—the irrigation of his permanent meadows, and the judicious course of cultivation which he has commenced to improve his other lands, and give him due credit for the very

* NOTE.—It is well known, that straw is extensively used for the material of bonnets in Europe; but it is not generally known, that the person who set up the manufacture of straw bonnets during the late war, in Philadelphia, and turned out most beautiful work, is still here, but was forced to break up the manufacture on the return of peace, and disperse eighty young women who were employed in it.—The Philadelphia article was much superior to those of Boston and Providence. This was proved by the preference given to the former over the production of the New England manufacture. The Philadelphia article was quite equal to the British.—What a reflection is it upon the Senate of the United States, that when such proofs are given of the ability of women to furnish an abundant and cheap supply of an expensive article of dress, they should refuse to patronise and encourage home industry.

laudable manner in which he is educating his sons to the profession of farmers.

Capt. Goodman, of East Hartford, they remark: by a judicious use of peat earth or marsh mud, has converted a barren blowing sand hill of five acres, into a fruitful field; and has moreover by this operation saved his other lands in the vicinity from being overwhelmed with drift sand. This experiment is of greater consequence, as it demonstrates the utility of peat earth as a manure on sandy soils, and particularly as there are large tracts of sand land and peat earth lying contiguous to each other, and extending on the east side of the river from north to south, through the county. Farmers may learn from this, the great benefit arising from a proper mixture of soils.

The farms of Messrs. Graves and of Deming, are noticed with commendation; and they remark, the high gratification they experienced during their tour of examination, by the evidences which have every where appeared, of increasing attention to improvements by the examples of others. This has been in nothing more remarkable, than in attention to manures. Before the institution of the Society, Composts were hardly known in the county; whereas now, they engage the attention of a great proportion of their best farmers; and, in one farm, the committee noticed a collection of 800 loads, all from materials which are still very abundant on the farm, and such as are within the reach of almost every farmer. Bogs and peat earth have constituted the basis of most of these composts, with lime *stratum super atratum*, on such earth, or the rich earth of head lands, the sites of old fences, hedge rows, or the cleansing of ditches, water courses, or small ponds—all farmers have it in their power to form quantities of composts, and no one should neglect them. Pennsylvania owes much of its fertility to them.

The committee properly bear testimony against the adherence to the old practice of having reservoirs of water in the barn yards. Manure should receive no water but that of the cattle, and this should be conveyed into pits, and pumped up on the heap.

On the Hessian Fly,

AND ON THE PROPER DEPTH OF SOWING

WHEAT.—No. IV.

[The letter signed William Merriwether published in the first vol. of this work, pages 125—6, and to which this is a reply—may be reckoned No. 5, and ought to be first read in connexion with this.]

FOR THE INQUIRER.

To Doctor John Adams, Secretary of the Agricultural Society of Virginia.

SIR—In a letter lately published by order of your society, from a gentleman of Amelia, a King William Farmer is there attacked for his heresy, in believing that, "if we would cover our wheat three inches deep, and sow it early, our crops would be better guarded against the fly, than they can ever be by grazing."

At the time that advice was given, it was not believed, that any recommendation of an anonymous writer, would induce one individual, to cover his wheat deep; who from experience, knew it to be injurious.

It appears to be quite fashionable now a days, to compliment gentlemen of high standing. It is not intended to detract from the merits of the communication made, to the Albermarle agricultural society, by a gentleman of Fluvanna, and least of all from the good intentions of the writer—he will, it is hoped,

be convinced, that any allusion to him is in self-defence, and extorted by some of his other friends. If I know that gentleman, he will never be displeased with a friend for differing with him in opinion.

The fact of the fly depositing its egg, on the blades of wheat, has been known to the northern farmers, for years, and how much have they been benefited?

As the gentleman of Amelia is desirous his friend should make him better acquainted with the natural history of the *Tipuli vaginalis tritici*, the liberty is taken (in the interim) of recommending for his perusal, the most learned history of that insect that has yet been published. It is from the pen of Doctor Samuel Akerley and may be found in the American Monthly Magazine, for August, 1817, No. 4, page 275. As no certain means are there pointed out, for destroying our enemy, and every recommendation is still hypothetical (except that of making our land rich) it yet remains for the scientific knowledge, and thirty years experience of the Amelia gentleman, to furnish that great desideratum.

To be better understood, reference is made to the society's engraving. Premising that it represents wheat as much matured, as we sometimes see it in April, when it has survived the fall, and has only to contend with the spring fly. It is known to all practical farmers that in attempting to cover wheat at any given depth, some of the grains will be deepest. Now to practical facts.

If wheat is sown on the banks of the Pamunkey, from the last of September, to the middle of October, and covered not more than three inches deep, should the weather be dry, the grains covered deepest, will first come up; if seasonable the reverse will happen. If the fly should deposit on the first blade, at any time before the coronal roots form at D. or elsewhere the maggots will force their way down the stalk, two and a half inches at most, destroying in their passage, and make their exit between D. and B. That nature being baffled in her first effort, new shoots are protruded by the seminal root (which ought to be) at B. That some of the wheat now stacking at the barn, is the product of these shoots.—That if not attacked by the fly, before, the coronal roots are formed, and the wheat begins to branch, the seminal roots will invariably die, so soon as the first named roots, can support the plant. Wheat covered not more than from one to two inches deep, if attacked by the fly, before the coronal roots form, that the maggots will easily find their way to the embryo crown at D. and destroy the plant in toto. That after the coronal roots to either wheat are formed, and the gentleman's daughters make their appearance, the fly is attracted by their superior charms, and my mother is of course neglected.*

From the above facts, may be drawn the following practical deductions. That by seeding wheat early, and covering it no more than three inches deep, in a light silicious loam, it has no unnatural effort of nature what-

* That the wheat rooting deepest, will grow most in winter and by the spring will best resist the fly.

ever to perform. That if the fly should deposit on the first blade, before the coronal roots form, the maggots have a very unnatural office to perform that of digging their own graves, two and a half inches at most from the surface. From which may be inferred, that like the gentleman's wheat they like to be about his vegetating point, and that they too, require a little atmospheric air.

In corroboration of the above fact and deduction, Dr. Ackerly on the Hessian fly may be consulted. He believes that by ploughing up our wheat stubbles, as deep as can be effected, immediately after harvest, the chrysalis must die, being thereby placed in a situation not congenial to its nature.†

As the ceremony is now over of introducing to the gentleman's better acquaintance my mother, he may tell you "some what about where," to find his daughters.

Can you, Mr. Secretary, say whether he has ever seeded wheat in a light silicious loam? Should he ever do so, he will be convinced that wheat covered three inches deep, in such a soil, is as near the influence of the atmospheric air (and his vegetating point) as it would be, if covered only two inches in the clay of his county.

It appears that some of the farmers of Amelia are as tenacious of bad habits, as the soil they cultivate. That notwithstanding their wheat rots in the ground, from being covered too deep, they still persevere in doing so; and that the practice of late years has very much increased. Has it not an awful squinting when we are told these things? Why do the neighbours of that gentleman with thirty years ocular demonstration of his superior skill, in the cultivation of wheat, now make it necessary, for him to complain to you, sir, of their obstinacy? Is it possible they can be of opinion that his wheat only looks better than their own, when handsomely engraved by your society, for the Inquirer?

It is said to be such a pretty thing to see one's name in print, that we publish right or wrong, and what difference does that make, a letter is a letter, although there is nothing in it. The foregoing remark will well apply to a letter lately addressed by a gentleman of Amelia, to your society.

With the request that you will have the goodness to present this communication to your society at their next meeting, I subscribe myself,

A KING WILLIAM FARMER.

† That wheat covered deep, if attacked by the fly, before the coronal roots form, will produce wheat from the seminal shoots, which is not the fact, if covered shallow, and that the wheat covered deepest, is best protected from the effect of frost in winter. No small advantage in clay soils.

FOR THE AMERICAN FARMER.

ON PHTHISIS PULMONALIS, OR

Consumption of the Lungs,

By Dr. Eli S. Davis, of Abbeville, (S. C.)

No. V.

Persons in whose families this disease has a hereditary predisposition should not intermarry.

Offspring from such a union would be very apt to receive a transmission of the weak morbid action of the lungs to which the parents were subject.

Men predisposed to consumption, should embark in no business that would require a sedentary more of life. Manual labour as I stated in my last number, is of itself a preventive and often a cure for consumption; but should this be deemed too irksome, exercise on horseback or on foot will be found salutary.

We cannot be too watchful of the promontory symptoms of this disease, nor can I close these remarks, without adverting to an opinion of Dr. R. Thomas, a late and judicious writer, on the modern practice of physic.

"The incipient symptoms of Phthisis, will vary with the cause of the disease; but when it arises in persons of a strumous temperament or from tubercles it is mostly thus marked:

"It begins with a short dry cough, that at length becomes habitual, but from which nothing is spit up for some time, except a frothy mucus, that seems to proceed from the fauces. The breathing is some what impeded, and upon the least bodily motion is much hurried; a sense of straitness, with oppression at the chest is experienced, the body becomes gradually leaner, and great languor with indolence, dejection of spirits and loss of appetite prevail.

"The face flushes particularly after eating, the palms of the hands and soles of the feet are affected with burning heat; the respiration is difficult and laborious, evening exacerbations become obvious, and by degrees the fever assumes the hectic form.

"The cause of hectic fever is generally supposed to be the absorption of vitiated purulency, but possibly it may proceed from other causes."

I perfectly accord with Thomas, in what he has said on consumption except the loss of appetite. So far from losing their appetite, patients most commonly have an inordinate inclination for food.

This disease is thought by some to be contagious, on which subject Thomas himself does not appear to be altogether decided.

Morgani, Van Swieten and others, were decidedly of opinion that it is contagious.

The Sicilians are so strongly confirmed in this opinion, that they are fearful to approach a consumptive patient, whose bed and bed clothes they consume with fire as soon as he dies. In the Venetian states the same erroneous idea prevails, and to a greater extent, for there they not only burn the clothes, but furniture of those who have died of the disease. Thomas informs us, that not only the natives but also the physicians of the Levant, entertain an opinion that phthisis is a disease of a contagious nature.

As to my own part, I do not hesitate a moment to say, that I do not believe it is contagious. In forming this opinion I have not been influenced by vague and superficial data; it is the result of sedulous inquiry.

(To be continued.)

FOR THE AMERICAN FARMER.

Accidents to Cattle.

Many valuable cattle are lost at this season of the year by their feeding near apple trees. In twisting their necks to get at the apples on the lower limbs the Epi-glottis is thrown open, and the apple if small is just as liable to roll into the windpipe as the gullet or trachea; in which case the animal is infallibly suffocated if not relieved in a few minutes. A gentleman who has been much among the Spaniards, informed me of the following plan used by them, and which he saw performed with success. Two or three men seize the animal and lay his neck over a log of wood, and then the operator feeling with his hand the obstruction, he strikes a smart blow with a mallet or billet of wood immediately over it, sufficient to crush the apple to pieces, which instantly begins to blow out, and the animal is speedily relieved. Not knowing any plan used in this country, I thought this information would be acceptable.

SUBSCRIBER.

Note. This and the cure for the gapes, published a few days past, is a hint to attend more to comparative anatomy.

THE FARMER.

BALTIMORE, FRIDAY, AUGUST 11, 1820.

☞ "A Virginia Farmer" in reply to "A Maryland Farmer," is in type, and will appear in our next.

☞ So few of the first volume of this journal are on hand, and they are going off so rapidly, that those who have subscribed for the second, would do well to secure the first—while they can.

☞ The letter from "A Subscriber," in Somerset county, setting forth the obstacles which there occur to the execution of the *Soiling system*, so highly recommended by ANATOR, (the great exemplar and father of improvements in southern agriculture,) has been communicated to a friend, from whom we hope to obtain the information desired.

Present Prices of Country Produce in this Market.

Actual sales of Wheat—WHITE, 90 to 93 cts.—RED, 85 to 88 cts.—CORN, 50 to 52 cts.—RYE, 48 cts.—OATS, 25 to 30 cts.—BUTTER, pr. lb. 20 to 25 cts.—EGGS, per doz. 12 to 15 cts.—VEAL, per lb. 6 to 8 cts.—LAMB, per quarter 37½ to 50 cts.—BEEF, prime pieces, 8 to 10 cts.—HAMS, 14 cts.—MIDDLEINGS, 10 cts.—LIVE CATTLE, \$6—CHICKENS, per doz. \$2 to \$2 50—POTATOES, 37½ to 50 cts.—TAR, \$2 25—SCARCE—TURPENTINE, soft, \$2 25—SPIRITS, do. 35 cts.—PITCH, \$2 25—BACON, hog round, 7 to 8 cts.—LARD, 11 to 12 cts.—PORK, prime 12 to 14 cts.—BLACK-EYE PEAS, 65 to 70 cts.—SHINGLES best, Deep Creek, \$8 50—Do. Small, \$4 75 to \$5.—FLOORING PLANK, 5-4, \$26—London WHITE LEAD, \$4 25—American do. \$3 75—Boiled OIL, \$1 37½—FEATHERS, 50 to 62½ cts.—SHAD, No. 1, trimmed \$7—COTTON, Upland, 20 to 21 cts.—FLOUR, from the wagons, \$4 75—WHISKEY, from do. 36 cts.—Virginia manufactured TOBACCO, sales the present week at \$9 and \$9 50.

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BY JOHN S. SKINNER, EDITOR.